

**Term Project Milestone 4 Evaluation (Components Specification) Team 2-1**  
**Points: 27 /30**

Evaluation Criteria Categories	Specific Criteria	Comments	Score
Consistency with higher level specifications	<ul style="list-style-type: none"> <li><input type="checkbox"/> Components have interfaces (inputs, outputs, and control signals) that are consistent with the datapath specification, including signal widths.</li> <li><input type="checkbox"/> Components produce behaviors that are consistent with the assembly language and register transfer language levels of the design specification.</li> <li><input type="checkbox"/> Components implement their behaviors within the timing constraints imposed by the RTL specification.</li> </ul>		(3)
Self-consistency	<ul style="list-style-type: none"> <li><input type="checkbox"/> Example: Specification of 1-bit ALU is consistent with specification of 16-bit ALU.</li> <li><input type="checkbox"/> Example: Specification of bi-directional variable-displacement shifter is consistent with specifications of unidirectional variable-displacement shifters.</li> </ul>		(3)
Demonstration of design principles 1. Simplicity favors regularity 2. Smaller is faster 3. Good design demands good compromises 4. Make the common case fast	<ul style="list-style-type: none"> <li><input type="checkbox"/> Component specifications are as simple as reasonably possible (e.g. variable-displacement shifters are composed of multiple fixed-displacement shifters).</li> <li><input type="checkbox"/> Component specifications are as small as reasonably possible (e.g. variable-displacement shifters use as few fixed-displacement shifters as possible).</li> <li><input type="checkbox"/> Conflicts between the preceding criteria are resolved by considering overall performance (e.g. design of variable displacement shifters considers how often shifts of various displacements actually are used)</li> </ul>	Specification is in great detail including instructions on the use of Xilinx for making them.	(3/3)
Documentation (see below) <input type="checkbox"/> Organization <input type="checkbox"/> Completeness <input type="checkbox"/> Conciseness	<ul style="list-style-type: none"> <li><input type="checkbox"/> All design decisions necessary to implement Xilinx model are documented (components may be implemented by core generated objects or built-in symbols, which include gates and some</li> </ul>	Your memo tells me nothing except that you split up M4. -2  Your journal is ok. I would prefer some mention of testing and how it went. -1	(13/16)

<input type="checkbox"/> Grammar and style	higher-level entities) <input type="checkbox"/> Clear English specifications as necessary <input type="checkbox"/> Component tests	Your design document is very good. This shows actual tests and how they will be done.	
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Required Documents

- Memo
  - Objective assessment of design and status
- Design Documentation
  - Demonstration of conceptual understanding
  - Highlights interesting features
- Design Process Journal
  - Alternatives considered
  - Tradeoffs
  - Decisions
- Website